

GOROKHOVA, N. I.

Dissertation: "Spectrophotometric Investigation of Stars in the Stellar Clusters of Coma Berenices and the Pleiades." Cand Phys-Math Sci, Main Astronomical Observatory, Acad Sci USSR, Jan-Mar 54. (Vestnik Akademii Nauk, Moscow, Aug 54)

SO: SUM 393, 28 Feb 1955

GOROKHOVA, N.N.

Spectrophotometric investigation of stars in the clusters of
the Pleiades and Coma Berenices. Izv.GAO 19 no.6:68-106
'55. (MIRA 13:5)

(Stars--Clusters)

GOROKHOVA, N.N.

Spectrophotometric investigation of stars in the Pleiades.
Inv.GAO 21 no.3:83-93 '58. (MIRA 13:4)
(Pleiades)

KIZHAYEV, V.I., dots., MELIKOVA, M.Yu., kand.med.nauk, GOROKHOVA, N.P.(Moskva)

Clinical picture of a calculus in the common bile duct. Klin.med.
36 no.11:127-130 N '58 (MIRA 11:12)

1. Iz propedevicheskoy terapevticheskoy kliniki (dir. - daystvitel'nyy
chlen AMN SSSR zaslyzhennyy deyatel' nauki prof. V.Kh. Vasilenko) i
gospital'noy khirurgicheskoy kliniki (dir. - daystvitel'nyy chlen
AMN SSSR zaslyzhennyy deyatel' nauki prof. B.V. Petrovskiy) I
Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(CHOLELITHIASIS, case reports,
choledocholithiasis (Rus))

ZAIKIN, M.D.; GOROKHOVA, N.P.; STEFADU, Z.A.; ZAIKIN, T.A.;
MOISEYEV, V.S.

Treatment of angina pectoris with nitranol. Khim. i med. no.16:
17-20 '61. (MIRA 17:8)

GOROKHOVA, N. V.

"Production Losses in Molasses-Yeast Factories and Measures for Controlling Them for the Sake of Increasing the Output of Yeasts and Improving Their Quality." Cand Tech Sci, Moscow Inst of National Economy imeni G. V. Plekhanov, Min Trade USSR, Moscow, 1955. (KL, No 11, Mar 55)

30: Sum. No. 670, 29 Sep 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

GOROKHOVA, N.V.; Prinimala uchastiye: LIFANT'YEVA, K.S.

Search for new effective substances for the disinfection of yeast
apparatus. Trudy TSNIKHP no.8:166-169 '60. (MIRA 15:8)
(Disinfection and disinfectants)
(Fermentation—Apparatus and supplies)

LIVKINA, Ye.G.; GOROKHOVA, O.V.

Activating action on levomycetin and synthomycin in vitro experiments with typhoid and dysentery bacteria. Antibiotiki, 4 no.2:69-73 Mr-Apr '59
(MIRA 12:7)

1. Kafedra mikrobiologii (zav. - prof. Ye.G. Livkina) Khabarovskogo meditsinskogo instituta.

(SHIGELLA, eff. of drugs on
chloramphenicol, activating eff. of oxygen (Rus))

(SALMONELLA TYPHOSA, eff. of drugs on
same)

(CHLORAMPHENICOL, eff.
on Shigella & Salmonella typhosa, activating eff. of
oxygen (Rus))

(OXYGEN, eff.
activating eff. on chloramphenicol action on Shigella
& Salmonella typhosa (Rus))

LIVKINA, Ye.G.; GOROKHOVA, O.V.

Study of the combined action of antibiotics and oxygen on local strains of dysenteric bacilli. Trudy Khab.med.inst. no.20:27-32 '60.
(MIRA 15:10)

1. Iz kafedry mikrobiologii (zav. prof. Ye.G.Livkina) Khabarovskogo ~~meditsinskogo~~ instituta.
(OXYGEN THERAPY) (ANTIBIOTICS) (SHIGELIA)

LIVKINA, Ye.G.; GOROKHOVA, O.V.

Variability of the paratyphoid B and breslau bacilli during the process of their adaptation to levomycetin and streptomycin under various conditions of aeration. Antibiotiki 7 no.4:305-309 Ap '62. (MIRA 15:3)

1. Kafedra mikrobiologii (zav. - prof. Ye.G. Livkina) Khabarovskogo meditsinskogo instituta.

(SALMONELLA) (LEVOMYCETIN) (STREPTOMYCIN)

LIVKINA, Ye.G.; GOROKHOVA, O.V.

Adaptation of local strains of paratyphoid B and Breslau bacilli to levomycetin and streptomycin under different conditions of culture. Trudy Khab. med. inst. 23 no.2: 75-79 '62 (MIRA 16:12)

1. Iz kafedry mikrobiologii (zav. prof. Ye.G.Livkina) Khabarovskogo meditsinskogo instituta.

GOROKHOVA, R. A.

Remizova, Ye. M. and Gorokhova, R.A. "Effect of various temperatures on the results of sulfur-diagnostic reactions in syphilis," Nauch. zapiski Gor'k. in-ta dermatologii i venerologii i Kafedry kozhno-verenich. bolezney GGMi in. Kirova, Issue 12, 1948, p. 222-28

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

LAZARENKO, Yevgeniy Konstantinovich; SHATROVA, I.M., red.;
GOROKHOVA, S.S., tekhn. red.

[Course in mineralogy] Kurs mineralogii. Moskva, Gos.izd-vo
"Vysshaya shkola," 1963. 558 p. (MIRA 17:1)

L 46968-66 EWP(k)/EWT(m)/T/EWP(w)/EWP(v)/EWP(t)/ETI TOPIC SOURCE CODE: UR/2981/66/000/004/0152/0158
ACC NR: AT6024924 (A,N)

AUTHOR: Fridlyander, I. N.; Vlasova, T. A.; Skachkov, Yu. N.; Shiryayeva, N. V.;
Surkova, Yu. I.; Gorokhova, T. A.; Ped', A. A.; Gur'yev, I. I.; Dzyubenko, M. V.

ORG: none

TITLE: Weldability of high-strength alloys of the Al-Zn-Mg-Cu system

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy
(Heat resistant and high-strength alloys), 152-158

TOPIC TAGS: aluminum zinc alloy, aluminum alloy property, weldability / V96 aluminum
zinc alloy

ABSTRACT: The object of the work was to study the weldability in the fusion welding of V96 alloy, and also to determine whether the weldability of this alloy can be improved by changing the chemical composition of the base metal and filler wire. Sheets of V96 alloy 2.5 mm thick of the chemical composition 8.44% Zn, 2.72% Mg, 2.2% Cu, 0.06% Mn, 0.13% Zr, 0.29% Fe, and 0.13% Si were used in the experiments. In order to decrease the tendency toward crystallization cracks, the welding should be carried out with Al-Mg alloy fillers (of type AMg6). The content of the main alloying elements in the base metal should be kept within the following limits: 6.5-7.5% Zn; 2.7-3.5% Mg; 1.6-2.0% Cu; 0.15-0.22% Zr. However, even then the tendency of V96-type alloys to form cracks during welding remains higher than in commonly used alloys of the Al-Mg

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ACC NR: AT6024924

system (AMg3, AMg6). A considerable softening of the metal occurs in the heat-affected zone. The modulus of resistance of welded butt joints made by argon-arc welding is 0.5-0.6 of that of the base metal immediately after welding or after aging. Weld joints of V96-type alloys have a lower bending angle than those of other weldable aluminum alloys. The low plasticity of the joints may cause a low structural strength in welded structures. Orig. art. has: 4 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001

Card 2/2

GOROKHOVA, T.I.; MAL'TSEV, A.N.; KOBOZEV, N.I.

Determining the fraction of active surface of platinum black
in catalytic reactions. Zhur. fiz. khim. 39 no.5:1206-
1210 My '65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

32662-66 EWT(m)/EWP(j)/T IJP(c) WW/RM
ACC NR: AP6015060 (A) SOURCE CODE: UR/0190/66/008/005/0960/0961

AUTHOR: Goldovskiy, Ye. A.; Kuz'minskiy, A. S.; Gorokhova, T. Ye.;
Dolgoplosk, S. B.

ORG: none

TITLE: Effect of the structure of arylenesiloxane polymers on their
thermal and thermooxidative stability

SOURCE: Vysokomo kulyarnyye soyedineniya, v. 8, no. 3, 1966, 960-961

TOPIC TAGS: ~~polymer~~, molecular property, thermal stability, heat resis-
tance, ~~arylenesiloxane polymer~~, polymer structure, MACROMOLECULE,
SILOXANE

ABSTRACT: The thermal and thermooxidative stability of high molecular
polydimethylsilylenesiloxanes has been investigated. The maximum
heat resistance was observed for homopolymers containing diphenylen-
oxide. The maximum thermooxidation resistance was observed for the
homopolymer containing meta-substituted phenylene groups. [NT]

SUB CODE: 11, 07/ SUBM DATE: 28Dec65/ ORIG REF: 001/ OTH REF: 001

Card 1/1 BLG

UDC: 678.01:54+678.84

DONSKAYA, Ye.P.; KARATAYEVA, Ye.A.; BUDILINA, Yu.D.; GOROKHOVA, V.I.;
DRITS, F.A.

M.A.Volkova; on her 60th birthday and the 35th anniversary of her
medical service. Probl.tub. 36 no.1:124 '58. (MIRA 11:4)
(VOLKOVA, MARIIA ALEKSANDROVNA, 1897-)

GOROKHOVA, V.M.

Structure and mineralization of the Kumyshkan complex metal
deposit. Izv. vys. ucheb. zav.; geol. i razv. 1 no.7:130 JI
'58. (MIRA 12:8)
(Kumyshkan region (Soviet Central Asia)---Ore deposits)

AUTHOR: Gorokhova, V.N.

SOV/149-58-6-1/19

TITLE: The Structure of the Kumyshkanskoye Polymetallic Deposits
(O strukture Kumyshkanskogo polimetallicheskogo mestorozhdeniya)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, 1958, Nr 6, pp 3 - 10 (USSR)

ABSTRACT: The Kumyshkanskoye polymetallic deposits are situated in the north-west spur of the Chatkal'skiy Range in the Parkentskiy Rayon of the Tashkent Oblast. They are characterised by comparatively small-scale areas of mineralisation, the presence of rich lead ores and rather complicated structure. These deposits are found along the contact zone between quartz porphyry (the youngest intrusive rock of the region) and the limestone. The bedded limestone and dolomite, into which the Meridional Dyke (quartz porphyry) intrudes, forms the N.E. limb of an anticlinal fold which is elongated to the N.W. - strike 300-320°, with an angled dip 25-30° to N.E. Systematic sampling showed that most of the contact was mineralised to some extent but industrial sulphide ores occurred only in definite favourable places along the

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SOV/149-58-6-1/19

The Structure of the Kumyshkanskoje Polymetallic Deposits

contact. From the mineralisation viewpoint the most important area is the western contact of the Meridional Dyke where the contact between the limestone and quartz porphyry sharply changes its direction and angle of dip. The ore-bearing deposits are lenticular in shape with a thickness of about 2 to 6 m and are approximately 45 to 55 m across; they are concave in the direction of the quartz porphyry. Formation of the structure of these deposits occurred in three stages: before, during and after the ore formation phase.

1) ~~Pre-ore~~-formation Stage. Tectonic movement occurred at the contact and a zone of disturbance with intensive crushing and mylonitisation formed along the western contact of the main Meridianal Dyke. The course of this zone of disturbance is inconstant, swinging from 350 to 35° and dipping to the E.S.E. with an angle, usually between 75 and 85° but sometimes wider. Faults associated with the movement are divided into the following types:

a) faults parallel to the main tectonic disturbance and dipping to the west; these reach their maximum development

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SOV/149-58-6-1/19

The Structure of the Kamyshlanskaya Polymetallic Deposits

in the quartz porphyry;

b) horizontal and near horizontal faults with a changing angle of dip; these follow the main form of the quartz porphyry and are not exposed;

c) faults in a N.E. direction (bearing $45-60^{\circ}$), dipping to N.W. with an angle of $45-60^{\circ}$; these are usually associated with ore bodies;

d) faults in a N.W. direction (bearing $295-320^{\circ}$), dipping to the N.E. at an angle of $55-60^{\circ}$; often these are filled with manganese carbonate or pyrites.

All these are shown in detail in Figure 2. Figure 3 shows the occurrence of limestone 'blocks' isolated by the main disturbance whilst Figure 4 shows in detail the location of limestone 'blocks' from which thin horizontal sections were made. Some 250 measurements of the orientation of the optical axes of calcite were made in each section. From this and other evidence it was concluded that the east side (quartz porphyry) had moved southwards while the west side (limestone) had moved northwards. Displacement along the contact varied and gave rise to a series of concave hollows or uncrushed highly porous areas which

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The Structure of the Kumyskanskoye Polymetallic Deposits

proved to be favourable to penetration by ore-bearing solutions.

2) Ore-formation Stage. Veins of pyrites, galena, sphalerite which cut through the rocks indicate that faults developed in two directions in this period.

These are:

a) parallel to the main disturbance (bearing 5-10°) with a steep dip to the N.W. or S.E.

b) N.E. direction (bearing 35-60°) with a dip to N.W. of 50-60°.

3) Post-ore-formation Stage. Renewed activity occurred along existing earlier displacements at the contact of the quartz porphyry with the limestone. Judging by the resulting phenomena these movements were quite intense and often repeated. Faulting in the following directions resulted in:

a) near the Meridian, falling to E.S.E. or S.W. with an angle of 45-55°;

b) unexposed course with a changing angle of dip;

c) faults in a N.E. direction, dipping to N.W., or occasionally to the S.W. at an angle of 60-65°;

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SOV/149-58-6-1/19

The Structure of the ~~Kumyshtinskoye~~ Polymetallic Deposits

d) faults in a N.W. direction, dipping to the N.E. or S.W. at an angle of 55-60°. The surface of these faults indicates friction and often has a thin smear of galena.

The following conclusions are drawn:

- A) The greatest intensity of tectonic movement at the contact of the dyke was in the pre-ore-formation stage.
- B) Ore-bearing deposits are connected with abrupt changes in the direction and dip of the contact of the limestone with the quartz porphyry.
- C) Necessary conditions for the formation of ore-bearing deposits such as these include the existence of faults in the pre-ore-formation stage.
- D) New ore bodies should be sought where an aggregate of the necessary conditions for ore formation appears to exist. There are 4 figures.

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SOV/149-58-6-1/19

The Structure of the Kumyshkanskoye Polymetallic Deposits

ASSOCIATION: Moskovskiy institut tsvetnykh metallov i zolota.
Kafedra poleznykh iskopayemykh
(Moscow Institute of Non-ferrous Metals and Gold.
Chair for Mineral Deposits)

SUBMITTED: April 22, 1958

Card 6/6

GORKHOVA, V-N.

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PHASE I BOOK EXPLOITATION

SOV/5740

Akademiya nauk SSSR. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov

Voprosy mineralogii, geokhimii i genezisa mestorozhdeniy redkikh elementov
(Problems in Mineralogy, Geochemistry, and Deposit Formation of Rare Elements)
Moscow, Izd-vo AN SSSR, 1960. 253 p. (Series: Its: Trudy, vyp. 4) Errata
printed on the inside of back cover. 2,200 copies printed.

Chief Ed.: K. A. Vlasov, Corresponding Member, Academy of Sciences USSR;
Resp. Ed.: V. V. Lyakhovich; Ed. of Publishing House: L. S. Tarasov;
Tech. Ed.: P. S. Kashina.

PURPOSE: This book is intended for geologists, mineralogists, and petrographers.

COVERAGE: This is a collection of 23 articles on the formation, geology, mineralogy, petrography, and geochemistry of deposits of rare elements in Siberia and [Soviet] Central Asia. The distribution and characteristics of rare elements found in these areas as well as some quantitative and qualitative methods of investigating the rocks and minerals in which they are found,

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Problems in Mineralogy (Cont.)

SOV/5740

or with which they are associated, are discussed. Two articles present an economic investigation of the possibilities of industrial extraction and utilization of selenium, tellurium, and hafnium. No personalities are mentioned. Each article is accompanied by references.

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Problems in Mineralogy (Cont.)

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ECONOMICS OF RARE ELEMENTS

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246

AVAILABLE: Library of Congress

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JA/dvm/mas
11-14-61

DRUZHININ, I.G.; GOROKHOVA, V.N.

Study of ternary aqueous systems consisting of manganese
and sodium chlorides and manganese chloride and sulfate at 25° C.
Izv.vys.ucheb.zav; khim.i khim.tekh. 4 no.5:765-771 '61.
(MIRA 14:11)

1. Kirgizskiy gosudarstvennyy universitet, kafedra khimii.
(Systems (Chemistry))

ACCESSION NR: AT4028291

8/2677/63/000/010/0171/0183

AUTHOR: Gorokhova, V. N.

TITLE: Rhenium in molybdenum and copper molybdenum deposits

SOURCE: AN SSSR. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov. Trudy*, No. 10, 1963. Redkiye elementy* v sul'fidny*kh mestorozhdeniyakh (rare earth elements in sulfide deposits) 171-183

TOPIC TAGS: rhenium, molybdenum deposit, copper molybdenum deposit, molybdenite, skarn, scheelite, pegmatite, sulfide, vein, stockwerk, quartz, galenite, sphalerite, pyrite

ABSTRACT: In this paper the author points out the geochemical similarity between rhenium and molybdenum. Rhenium disulfide has the same crystal structure as molybdenite. The basic mass of rhenium is accumulated in molybdenites of molybdenum deposits of various genetic types. N. A. Khrushchov pointed out eight ore formations as possible endogenic deposits (Geneticheskiye tipy* molibdenovy*kh mestorozhdeniy SSSR. V. Kn.: "Mezhdunarodnyy geologicheskiy kongress." Tr. 17 Sessii, D. 5, 1940. Genetic types of molybdenum deposits of the USSR., International Geological Congress," Proceedings of the 17th Session, vol. 5, 1940). The author points out the deficiencies in this classification. The molybdenum bearing
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ACCESSION NR: AT4028291

pegmatite formation is widely distributed, but it has no practical value for molybdenum and rhenium. Molybdenum bearing pegmatites are separated into two groups. 1) syngenetic (Schlieren) pegmatites, and 2) injection (vein) pegmatites. The rhenium content in molybdenites of the various types of formations throughout the Soviet Union are listed in a series of tables. In conclusion, the author claims that an analysis of the material compiled to the present time on the question of the rhenium distribution in various ore regions of the Soviet Union shows that rhenium is accumulated in molybdenite of molybdenum deposits formed in secular, as well as young tectonic-magmatic cycles; moreover, its behavior in molybdenum deposits of various genetic types associated with the various metallogenic cycles remains approximately the same. The highest rhenium concentrations are found in copper and copper molybdenum types of deposits of the molybdenum bearing secondary quartz formation formed in early geological epochs as well as in later geological epochs. Orig. art. has: 9 tables.

ASSOCIATION: Institut minerologii, geokhimii i kristalloghimii redkikh elementov, AN SSSR (Institute of Mineralogy, Geochemistry and the Chemistry of Crystals)

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: ML, EL

NO REF SOV: 020

OTHER: 002

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SOV/ 49-58-11-15/18

AUTHOR: Gorokhova, V. S.

TITLE: Remarks on the T.A. Romanyuk Correction Formula for the determination of the Force of Gravity Readings Made at Sea (Nekotoryye zamechaniya o formule popravki k nablyudennomu na more znacheniyu sily tyazhesti, vyvedennoy V. A. Romanyukom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 11, pp 1402-1405 (USSR)

ABSTRACT: Romanyuk's formula (Eq.24) defines a correction of the values of the force of gravity by means of a pendulum apparatus (Ref.1). If the expression :

$$\sum \alpha_{0i}^0 \sin w_{0i} t$$

is substituted by:

$$\alpha_0 = - \frac{\ddot{x}_0}{g}$$

then the formula (24) can be written

as (24'), which is analogical to the expression given by Zhongolovich (Ref.2). By summing Zhongolovich's equations

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Remarks on the V.A. Romanyuk Correction Formula for the Determination of the Force of Gravity Readings Made at Sea

(Eqs. 110, 125, 147' and 147), the full correction for an inclination and acceleration can be obtained. If in Eqs. (110 + 125 + 147' + 147) a correction (\ddot{z}) is added, then the expression (147) takes a coefficient k . If now β^2 is substituted for $(\Delta\beta)^2$ in Eqs. (110 + 125 + 147' + 147) (Ref. 1, p 464), then the final Zhongolovich formula is obtained:

$$\delta g = \frac{g}{2} [(\Delta\beta)^2] + \frac{k_0 g}{n_1^2} ([\dot{\gamma}^2] - [\beta^2]) - \frac{[\ddot{x}_0^2]}{2g} - \frac{[\ddot{y}_0^2]}{2g} + \frac{[\ddot{z}_0^2]}{4g} - [\ddot{z}_0]$$

The directions of the acceleration \ddot{x}_0 and \ddot{y}_0 of Zhongolovich and Romanyuk are different. But they both include the expression:

$$\frac{[\ddot{x}_0^2]}{2g} + \frac{[\ddot{y}_0^2]}{2g}$$

Card 2/5 As in all the formulae, the sum of $\ddot{x}_0^2 + \ddot{y}_0^2$ denotes a square

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Remarks on the V.A. Romanyuk Correction Formula for the Determination of the Force of Gravity Readings Made at Sea

of the horizontal acceleration, thus the formula (24^o) is similar to the Zhongolovich one. Erroneously, Romanyuk considers that the 3rd term in the disintegrating formula of $\sin \theta_1$ and $\sin \theta_2$ in the Eqs.(95^{***}) should be omitted. If this is done, the effect of the horizontal acceleration on the equation of the fictitious pendulum will be partially due to the large interpolation error. This error is expressed as

$-\frac{1}{8} \phi^2$, which Romanyuk excludes from the Eq.(98). In addition, Zhongolovich in his Eq.(47) considers that the term $-\frac{n^2}{24} \theta^3$ gives the necessary correction for the amplitude.

Both corrections for the horizontal acceleration and the amplitude for the fictitious pendulum were defined independently; the former was found to be equal to that of Zhongolovich,

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$\Delta_x g = -\frac{\ddot{x}^2}{2g}$, the latter, expressed by the disregarded term in (98), $-\frac{n^2}{24} \theta^3$ was found equal to $\delta_A g = -\tau \frac{a^2}{64}$.

In connection with the computation of the correction according to the Romanyuk formula, it should be noted that the components X_0 , Y_0 , Z_0 can be found from:

$$\ddot{X}_0^2 + \ddot{Y}_0^2 + \ddot{Z}_0^2 = \ddot{U}_0^2 + \ddot{V}_0^2 + \ddot{W}_0^2 = R^2$$

where R is the resulting acceleration affecting the pendulum. Then the expression (a) can be found and by transformation and substitution of the expression Z_0 for W_0 in Eqs. (14) and (16), it is possible to equalise Z_0 and W_0 and to exclude the value $\Delta Z_0 \approx \tan \alpha \ddot{U}_0 + \tan \beta \ddot{V}_0 \approx \alpha \ddot{U}_0 + \beta \ddot{V}_0$.

When the angles of inclination, α and β , depend on the accelerations U_0 and V_0 with no vertical component, the

Card 4/5 error ΔZ_0 becomes constant. This can be shown as an

SOV/ 49-58-11-15/18

Remarks on the V.A. Romanyuk Correction Formula for the Determination
of the Force of Gravity ~~Readings~~ Made at Sea

example: if $\alpha = \beta = 2^\circ \approx 1/30$ $\ddot{U}_0, \ddot{V}_0, \ddot{Z}_0 \approx 30 \text{ cm/sec}^2$,
the number of measurements of \ddot{Z}_0 , $n \approx 100$, then the mean
error of the value \ddot{Z}_0 $\Delta[\ddot{Z}_0] \approx 2 \text{ cm/sec}^2$, therefore
the exact values of $3[\ddot{Z}_0^2]/4g$ and $[\ddot{Z}_0]$ should be calculated
from the formula:

$$\ddot{Z}_0 = b_{31}\ddot{U}_0 + b_{32}\ddot{V}_0 + b_{33}\ddot{W}_0$$

There are 2 Soviet references.

SUBMITTED: January 20, 1958.

Card 5/5

S/006/60/000/009/001/003
B012/B054

AUTHORS: Molodenskiy, M. S., Corresponding Member of the AS USSR,
Gorokhova, V. S.

TITLE: The Possibility of Increasing the Distance Between
Astronomic Points in Astronomic-gravimetric Leveling ✓

PERIODICAL: Geodeziya i kartografiya, 1960, No. 9, pp. 17-20 ✓


TEXT: In his paper (Ref. 1, footnote on p. 17), M. S. Molodenskiy referred to cases where it is desirable to increase the "pace" of astronomic-gravimetric leveling considerably. In another paper (Ref. 2, footnote on p. 17), the same author investigated the errors occurring in astronomic-gravimetric leveling at 100 km distances between two astronomic points. In the present paper, the authors make a calculation taking account of the spherical form of the Earth, and show that these distances can be increased considerably. As in the previous papers, the entire surface of the Earth is divided into two areas: 1) Σ -area in which the gravitational anomaly is assumed to be known for every point; 2) Σ' -area covering the remaining part of the Earth's surface. The ✓

Card 1/2

The Possibility of Increasing the Distance
Between Astronomic Points in Astronomic-
gravimetric Leveling

S/006/60/000/009/001/003
B012/B054

calculation shows that in astronomic-gravimetric leveling distances of up to 1,000 km and more are permissible between astronomic points. The maximum error of the gravimetric correction $\Delta \xi (\Sigma')$, due to anomalies not considered in the Σ' -area, is 0.1" in this case. There are 2 figures, 1 table, and 3 Soviet references.



Card 2/2

BOGACHEV, V.K.; Prinimala uchastiye GOROKHOVA, V.V.

Present status of geobotanical studies on Yaroslavl Province.
Dokl. na nauch. konf. 1 no.4:41-50 '62; (MIRA 16:8)
(Yaroslavl Province—Phytogeography)

BOGACHEV, V.K.; GOROKHOVA, V.V.; DUBROVINA, A.V.

New data on the occurrence of plant species rare for
Yaroslavl Province. Bot. zhur. 49 no.5:709-712 My '64.
(M. RA 17:8)

1. Yaroslavskiy pedagogicheskiy institut.

1. GOROKHOVA, YE. M.
2. USSR (600)
4. Pneumothorax
7. Recourse to bilateral pneumothorax. Sov. med. 16 no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

GOROKHOVA, Ye. M.
BONDAR', N.I.; GOROKHOVA, Ye.M.; ZHINGEL', I.P.; KOPEL'MAN, M.Yu. (Moskva)

Cavernotomy in the treatment of giant and large caverns. Klin.med.
34 no.12:12-19 D '56. (MIRA 10:2)

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo tubercules-
nogo instituta (dir. V.F.Chernyshev, nauchnyy rukovoditel' - prof.
V.L.Mynis) i 2-y sagorodnoy Moskovskoy tuberkuleznoy bol'nitsy
(glavnyy vrach D.I.Dymarin zav. khirurgicheskim otdeleniyem M.Yu.
Kopel'man, konsul'tant N.I.Bodnar')

(TUBERCULOSIS, PULMONARY, surg.
resection of large & giant cavitations)

GOROKHOVA, Ye. M., Candidate Med Sci (diss) -- "Bilateral combined collapse therapy of patients with pulmonary tuberculosis". Moscow, 1958. 14 pp (Min Health USSR, Central Inst for the Advanced Training of Physicians), 200 copies (KL, No 23, 1959, 171)

GOROKHOVA, Ye.M.

Bilateral combined collapse therapy in pulmonary tuberculosis
[with summary in French]. Probl.tub. 36 no.2:40-44 '58.(MIRA 11:5)

1. Iz kafedry tuberkuleza (zav. - prof. A.Ye. Rabukhin)
TSentral'nogo instituta usovershenstvovaniya vrachey (dir. V.P.
Lebedeva)

(TUBERCULOSIS, PULMONARY, surg.
collapse ther., bilateral combined (Rus))

RAEUKHIN, A. Ye. (Moskva, Leningradskiy prospekt, 75-a, kv.56);
PEREL'MAN, M.I.; ALEKSEYEVA, V.M.; GARGOLOVA, V.O.; GOROKHOVA,
Ye.M.; IOFFE, F.M.; LEVITIN, F.I.

Significance of compound treatment in the effectiveness of
surgical interventions in pulmonary tuberculosis. Vest. khir.
92 no.4:28-32 Ap '64 (MIRA 18:1)

1. Iz kafedry tuberkuleza Tsentral'nogo instituta usovershen-
stvovaniya vrachev (rektor - M.D. Kovrigina) bol'nitsy Mi-
nisterstva putey soobshcheniya (glavnyy vrach - A.A.Potsube-
yenko) i klinicheskoy bol'nitsy "Zakhar'ino" (glavnyy vrach
V.P.Petrik).

BUGROVA, V. P.; GOROKHOVA, YE. N.; KARPOVSKAYA, A. P.; KOKINA, N. N.; MELYUKOV, F. G.;
PALILOV, N. A.; RASTREPINA, V. S.

Onions

Adopting warm storage of onion seed plants, Sad i og., No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1957, Uncl.

LEUTSKIY, K.M., prof., otv. red.; KALYUZHNYI, I.F., dots., red.;
LISHCHENKO, N.A., dots., red.; BYKOVA, O.Ye., kand. filol.
nauk, red.; GOROKHOVA, Z.N., dots., red.; TOKMAKOV, A.I.,
dots., red.; DOMBROVSKIY, A.V., dots., red.; BELYAYEV, N.G.,
dots., red.; LYUBOPYITNOVA, V.S., dots., red.; MUZYCHKO, G.I.,
tekhn. red.

[Science yearbooks for 1957] Nauchnyi ezhegodnik za 1957 god.
Chernovtsy, Chernovitskii gos. univ., 1958. 522 p.

(MIRA 16:10)

1. Czernowitz. Universytet. 2. Rektor Chernovitskogo gosudarstvennogo universiteta (for Leutskiy).

(Science--Yearbooks)

(Social sciences--Yearbooks)

MOLOTKOVSKIY, G.Kh. [Molotkovs'kiy, H.Kh.], prof., otv.red.; ARTEMCHUK, I.V., dotsent, red.; GOROKHOVA, Z.N. [Horokhova, Z.N.], dotsent, red.; LIBERMAN, I., tekhnred.

[Transactions of the Expedition for the Comprehensive Study of the Carpathian Mountains and Ciscarpathia] Pratsi. Chernovtsy, Vyd.Chernivets'koho derzh.univ. Vol.6. (Seria biologichnykh nauk) Roslynni resurasy. 1959. 143 p.

(MIRA 13:11)

1. Ekspedytaiia po kompleksnomu vyvchenniu Karpat i Prikarpatia. (Carpathian Mountain region--Botany, Economic)

GOROKHOVA, Z.N.; SHELYAG-SOSONO, Yu.R.

Taxus baccata L. in the forests of Chernovtsy Province. Bot. zhur.
45 no.9:1322-1325 S '60. (MIRA 13:9)

1. Chernovitskiy gosudarstvennyy universitet, g. Chernovitsy.
(Chernovtsy Province--Yew)

GOROKHOVA, Z.N. [Horokhova, Z.N.]; SOLODKOVA, T.I.

Forest vegetation of the Bukovina Skiba Carpathians and its
rational utilization. Ukr. bot. zhur. 22 no.3:68-73 '65.

(MIRA 18:7)

1. Chernovitskiy gosudarstvennyy universitet, kafedra botaniki.

GOROKHOVA-RYZHKOVSKA, P. Ye.

GOROKHOVA-RYZHKOVSKA, P. Ye. - "Secretory Function of the Stomach
During Various Types of Ulcerous Diseases." Sub 20 May 52,
Central Inst for the Advanced Training of Physicians.
(Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

18 8200
5.2100

68630

S/126/60/009/02/019/033

AUTHORS: Garber, R.I., Zalivadnyy, S.Ya. ^{E032/E314} and Gorokhovatskiy, F.S.

TITLE: Determination of the Anisotropy¹ in the Microhardness²⁶ of Beryllium Crystals

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol 9, Nr 2, pp 274 - 278 (USSR)

ABSTRACT: The aim of the present work was to study the anisotropy in the microhardness of a single crystal of beryllium. The study was made on 99.4% pure monocrystalline beryllium. The crystallization was carried out at 10^{-6} mm Hg in the apparatus shown schematically in Figure 1, in which 1 is a beryllium oxide crucible which has a hemispherical bottom and conical side walls, 2 is the crucible cover, 3, 4, 5 and 6 are electrical heaters, 7 is a jacket, 8 and 9 are screens, 10 is a support, 11, 12, 13 are apertures for thermocouples and 14, 15, 16, 17 and 18 are leads for the electrical heaters. The temperature of the molten material was brought up to 1400°C (120°C above the melting point of beryllium). It was held at that temperature for about one hour and then uniformly cooled from the bottom upwards.

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S/126/60/009/02/019/033

E032/E314

Determination of the Anisotropy in the Microhardness of Beryllium Crystals

The crystallized beryllium was then removed from the apparatus after being cooled down to room temperature. The specimens were worked into a spherical form and suitably polished and the microhardness was determined at the points indicated in Figure 2 (circles). The specimens were orientated with the aid of X-ray diffraction photographs which were also used to judge the quality of the specimens. The microhardness was then measured using the PMT-2 microhardness gauge with a load of 100 g. Typical polar diagrams are shown in Figures 4 and 5 which refer to the plane containing C_6 and the plane perpendicular to C_6 , respectively. It is concluded that the microhardness diagram for beryllium is close to an ellipsoid of revolution about the sixfold axis, the ratio

✓

Card 2/3

KOROBCHANSKIY, V.I.; DUBROVSKAYA, D.P.; GOROKHOVA, Z.Ya.; SMOTKIN, Ya.N.

Removal of carbon disulfide from benzol by an alkaline solution
of methanol. Koks i khim. no.12:36-38 '60. (MIRA 13:12)

1. Donetskij politekhnicheskij institut (for Korobchanskiy).
2. Makeyevskiy koksokhimicheskiy zavod (for Smotkin).
(Benzene) (Carbon disulfide)

ACC NR: AP7010716

SOURCE CODE: UR/0020/66/171/006/1373/1375

AUTHOR: Nekryach, Ye. F.; Gorokhovatskaya, N. V.; Avramchuk, L. P.;
Kurilenko, O. D.; Dumanskiy, A. V. (Corresponding Member AN SSSR)

ORG: Institute of General and Inorganic Chemistry, Academy of Sciences
Ukrainian SSR (Institut obshchey i neorganicheskoy khimii AN UkrSSR)

TITLE: Nature of exchange ions and the hydration energy of ionites

SOURCE: AN SSSR. Doklady, v. 171, no. 6, 1966, 1373-1375

TOPIC TAGS: ion exchange, heat of hydration, ionite

SUB CODE: 07

ABSTRACT: The authors state that while studying the heats of hydration of some hydrophilic polymers, they used ionites as a convenient model object for investigation. When wetting with water dry and moistened samples of K^+ , Na^+ , Ca^{2+} and Fe^{3+} forms of the sulfostyrene cationite KU-2 with a nominal divinylbenzene content of 4 and 20%, the heats increased in all cases in the order $K^+ < Na^+ < Ca^{2+} < Fe^{3+}$. This gave rise to the thought that there is a certain relationship between the energy of hydration and the charge of the counter ions. To check this supposition, the authors undertook to investigate the heats of wetting with water at 20° sulfo-

Card 1/2

UDC: 536.664 + 541.183.12

0730

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ACC NR: AP7010716

styrene cationite samples with the following exchange ions: single-charged Cs⁺, Rb⁺, K⁺, Na⁺, Li⁺; doubly-charged Ba²⁺, Ca²⁺, Mg²⁺; and triply-charged Fe³⁺, Al³⁺. At the same time, water-vapor sorption isotherms were taken for the same samples at 20° on a vacuum sorption apparatus. The authors state that the results justify the assertion that a direct relationship exists between the size of the charge of exchange ions and the hydration energy of ionites as determined from the heats of wetting them with water. Orig. art. has: 1 figure. [JPRS: 40,351]

Card 2/2

Gorokhovatskiy, Ya. B.

USSR/ Chemistry - Inorganic chemistry

Card 1/1 Pub. 116 - 6/29

Authors : Gorokhovatskiy, Ya. B.; Rubanik, M. Ya.; Belaya, A. A.; Popova, Ye. N.; Kholyavenko, K. M.; and Shcherbakova, G. D.

Title : Kinetics of catalytic oxidation of ethylene into ethylene oxide in a zone exceeding the maximum limit of spontaneous combustion

Periodical : Ukr. khim. zhur. 21/6, 714-720, Dec 1955

Abstract : The relation between the rate of reaction and the ethylene and oxygen contents in the basic reaction mixture was investigated in a zone exceeding the maximum limit of spontaneous combustion. It was established that the yield does not depend upon the ethylene content in the mixture but increases with the increase in the oxygen content of the mixture. The equation governing the kinetics of oxidation of ethylene over a silver catalyst (in the case of rich ethylene mixtures) is presented. The heat of activation for the summary ethylene oxidation process was established at 18 kcal/mol. Ten references: 3 USSR, 1 Austral., 1 Canad., 4 Eng. and 1 USA (1945-1954). Tables; graphs.

Institution : Acad. of Sc., Ukr. SSR. Inst. of Phys. Chem. im. L. V. Pisarzhevskiy

Submitted : April 14, 1955

RUBANIK, M.Ya.; KHOLYAVENKO, K.M.; ~~GOROKHOVATSKIY, Ya.B.~~; BELAYA, A.A.;
POPOVA, Ye.N.; SHCHERBAKOVA, G.D.

Effect of macrofactors on the rate of catalytic oxidation of
ethylene. Ukr.khim.zhur. 22 no.2:190-196 '56. (MLRA 9:8)

1. Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN USSR,
(Oxidation) (Ethylene)

GORB, T.F.; GOROKHOVATSKIY, Ya.B.

Oxidation of ethylene on silver catalysts of various granulation.
Trudy KTIPP no.17:173-177 '57. (MIRA 13:1)
(Silver) (Ethylene)

GOROKHOVATSKIY, Ya.B.; RUBANIK, M.Ya.

Catalytic oxidation of propylene on silver. Ukr. khim. zhur.
24 no.1:63-67 '58.

(MIRA 11:4)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN USSR.
(Oxidation) (Propylene) (Catalysts)

5(1,3)

AUTHORS:

Gorokhovatskiy, Ya. B., Rubanik, M. Ya., SOV/20-125-1-21/67
~~Kholodovenko, K. K.~~

TITLE:

On the Influence Exercised by Reaction Products on the Rate of the Catalytic Oxidation of Ethylene (Vliyaniye produktov reaktsii na skorost' kataliticheskogo okisleniya etilena)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 1, pp 83-86 (USSR)

ABSTRACT:

The problem mentioned in the title was to be investigated in detail in the present paper since it is still rather insufficiently dealt with in publications (Ref 1). These reaction products are ethylene oxide, CO₂, and steam. The flow-circulation method (Ref 2) was employed for these investigations. The rate was measured with constant concentrations in the cycle of the initial substances and with different concentrations of the reaction products. For this purpose the flow rate and the ethylene concentration of the supply mixture were measured at a constant temperature. The acceleration of the flow led to a decrease in the ethylene oxidation. The reaction rate, however, increased (Table 1).

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On the Influence Exercised by Reaction Products
on the Rate of the Catalytic Oxidation of Ethylene

SOV/20-125-1-21/67

This effect may be explained only by the decrease of concentration of the inhibiting products (Ref 3). In order to find out which product mainly inhibits the reaction, traps (collecting vessels)(Fig 1) were introduced between the pump and the reactor. In these traps the individual reaction products were captured which formed during the passage through the catalyst. Since in this way the product concerned was eliminated (or its quantity at least strongly reduced) its influence could be estimated by a comparison of the reaction rate in its presence and absence. Table 2 shows the action of H_2O and CO_2 on the oxidation rate of C_2H_4 at 215° . The reaction rate increases by approximately 1.2 - 1.25 times due to dehydration without a variation in the selectivity. A simultaneous removal of H_2O and CO_2 increases the rate by about 1.6 - 1.7 times. The selectivity decreasing in the case of a removal of CO_2 shows that CO_2 inhibits the reaction of the complete ethylene oxidation more strongly than the reaction of C_2H_4O formation. Higher amounts of CO_2 have a weaker inhibiting effect than smaller ones (Fig 2).

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On the Influence Exercised by Reaction Products
on the Rate of the Catalytic Oxidation of Ethylene

SOV/20-125-1-21/67

Table 3 shows the action of C_2H_4O . Its removal accelerates the reaction more than mere dehydration. Acceleration was, however, not uniform in the various experiments. In this case probably the decrease of concentration of the remaining C_2H_4O has produced an effect. This was confirmed by experiments on another catalyst (Table 3). The reaction products form a series with respect to their inhibiting effect:
 $C_2H_4O > CO_2 > H_2O$. A. A. Belaya, Ye. N. Popova and G. D. Shcherbakova took part in the experimental work. V. A. Royter, Corresponding Member, AS UkrSSR gave advice. There are 2 figures, 3 tables, and 5 references, 4 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo Akademii nauk USSR (Institute of Physical Chemistry imeni L. V. Pisarzhevskiy of the Academy of Sciences, UkrSSR)

PRESENTED: November 25, 1958, by B. A. Kazanskiy, Academician

SUBMITTED: December 9, 1957
Card 3/3

RUSSIAN BOOK EXAMINATION

507/992

Abstracts and Index. Institute of Chemistry, USSR Academy of Sciences. [Vol. 10] Physics and Chemistry of Catalysis. [Vol. 10] Physics and Chemistry of Catalysis. Moscow, USSR: AS USSR, 1960. Vol. 10. 300 pages. 2,000 copies printed.

Vol. 10. 300 pages. Corresponding Member of the Academy of Sciences USSR, and O.T. Kozlov, Candidate of Chemistry. Ed. of Publishing House: A.L. Kozlovskiy. Moscow, USSR: AS USSR, 1960.

NOTE: This collection of articles is addressed to physicists and chemists and to the community of scientists in general interested in recent research on the physics and physical chemistry of catalysis.

CONTENTS: The articles in this collection were read at the conference on the Physics and Physical Chemistry of Catalysis organized by the USSR Academy of Sciences and the USSR Academy of Chemical Sciences, Academy of Sciences USSR and by the Academic Council on the problem of "the scientific bases for the selection of catalysts." The conference was held at the Institute of Chemistry, USSR Academy of Sciences (Institute of Physical Chemistry of the AS USSR) in Moscow, March 20-25, 1960. Of the great volume of material presented at the conference, only papers not published elsewhere were included in this collection.

Prokhorov, V.A., O.T. Kozlov, and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Catalytic Properties of Germanium 108

Kozlovskiy, S.G., and O.T. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

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Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Kozlovskiy, S.G., Kozlovskiy, S.G., and S.G. Kozlovskiy. [Institute of Physical Chemistry of the AS USSR]. Investigation of the Reaction Between the Catalytic Activity and the Semiconductor Properties of Germanium 108

Gorokhovskiy, V.A.

GOROKHOVATSKIY, Ya.B.

Relationship between catalysis, chemisorption, and the electronic state of a metal surface. Probl. kin. i kat. 10:169-171 '60.

(MIRA 14:5)

1. Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN USSR.
(Catalysis) (Chemisorption)

86156

S/073/60/026/005/008/019
B004/B063

11.1330
AUTHORS:

Gorokhovatskiy, Ya. B., Rubanik, M. Ya.

TITLE:

Electron Mechanism of the Reaction of Oxygen and Ethylene
With Silver

PERIODICAL:

Ukrainskiy khimicheskiy zhurnal, 1960, Vol. 26, No. 5,
pp. 594-599

TEXT: The authors discuss data published on the sorption of initial substances or reaction products on catalysts. Most of these data were obtained under conditions that do not occur in practice. It is noted that the sorption of a gas mixture may differ from that of its components. The present work was carried out to obtain data on the sorption of ethylene on silver in the presence of oxygen. The method applied is based on the measurement of the contact potential difference (cpd) having the reversed sign of the work function. The measurement was made with a vibrating device suggested by V. I. Lyashenko in Ref. 6. Silver films served as experimental electrodes, and gold as a reference electrode. It was found that cpd is lowered by increasing temperature and blowing air through the cell

Card 1/3

Electron Mechanism of the Reaction of Oxygen
and Ethylene With Silver

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B004/B063

simultaneously. After a decrease of temperature, the original value was no more attained. However, it was reached again by etching the silver film with HNO_3 . This was ascribed to the formation of a negatively charged, chemically adsorbed layer of oxygen on the silver surface. Oxygen attracted electrons of the metal, and was polarized and sometimes even ionized. An addition of 3-3.7% of ethylene to air increased cpd. It decreased again when only air was blown through the cell. cpd changed by 15-100 mv. However, when ethylene with an oxygen content of only 1-2% was blown through the cell, cpd changed by 300-400 mv. A comparison with nickel electrodes has shown that between 20 and 120°C silver adsorbs more C_2H_4 than nickel, and nickel more than gold. The work function was lowered by the displacement of electrons from the C_2H_4 molecule to silver, or to the oxygen adsorbed on silver. C_2H_4 was positively charged. This effect became stronger with an increase of the partial pressure of C_2H_4 . C_2H_4 was not adsorbed on degassed silver. Summing up: The adsorption of an oxygen-ethylene mixture differs from the separate adsorption of ethylene and oxygen.

Card 2/3

S/020/60/132/05/42/069
B004/B011

5,3200
5,1190
AUTHORS:

Belousov, V. M., Gorokhovatskiy, Ya. B., Rubanik, M. Ya.,
Gershingorina, A. V.

TITLE:

Catalytic Oxidation of Propylene and Acrolein on Copper
Contact

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 5,
pp. 1125-1128

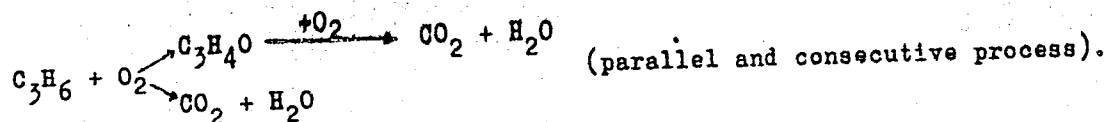
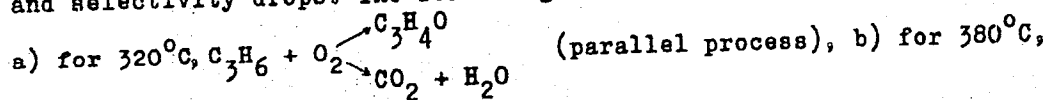
TEXT: This is the reproduction of a lecture delivered at the Vsesoyuznaya konferentsiya po organicheskomu katalizu (All-Union Conference on Organic Catalysis) on November 19, 1959. The authors investigated the dependence of the concentration of substances forming in the oxidation of propylene and acrolein on temperature and contact duration. The catalyst was copper oxide applied to carborundum; the reaction took place at 300-400°C and contact times of 0.4-4.0 sec. For comparison purposes, experiments were also conducted without a catalyst. The resulting CO₂ was either absorbed in titrated Ba(OH)₂, or, like C₃H₆, O₂, and CO, determined by means of

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Catalytic Oxidation of Propylene and Acrolein
on Copper Contact

S/020/60/132/05/42/069
B004/B011

the BTM-2^{2b} (VTI-2) gas analyzer. Acrolein was determined by means of the bromide-bromate method. Experimental data are given in Table 1. Fig. 1 shows for C_3H_6 the dependence of the amount of the resulting CO_2 and C_3H_4O on temperature and contact duration τ , and Fig. 2 the dependence of the selectivity of oxidation on the same conditions. At $320^\circ C$, the amount of CO_2 and C_3H_4O increases steadily with τ , with the selectivity remaining constant. At $380^\circ C$, the concentration of C_3H_4O at $\tau = 1.2$ sec reaches a maximum, while the CO_2 concentration grows steadily with τ , and selectivity drops. The following reactions are derived therefrom:



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S/020/61/137/006/015/020
B101/B201

AUTHORS: Belousov, V. M., Gorokhovatskiy, Ya. B., Rubanik, M. Ya., and
Gershingorina, A. V.

TITLE: Study of the kinetics of the catalytic oxidation of propylene
to acrolein by means of the circulating flow

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 6, 1961, 1396-1398

TEXT: The authors wanted to complete the data on the kinetics of the oxidation of propylene to acrolein by means of a cuprous catalyst. The circulating-flow method was employed for the purpose. The data presented in Table 1 show that raising the rated flow to over four times remains without an effect upon the rate W_1 of acrolein formation, upon W_2 of the CO_2 formation, upon the transformation degree X_{O_2} of oxygen, and the selectivity $S_{C_3H_6}$.

Hence, the experimental data were not distorted by diffusion effects. The kinetics of the process was studied by means of a catalyst containing 2.4 g Cu per liter. [Abstracter's Note: no information is supplied regarding

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Study of the kinetics ...

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composition and preparation of the catalyst]. The carborundum carrier, grain size 2-3 mm, was large-porous (mean diameter $6 \cdot 10^{-2}$ cm). Some of the experimental data are presented in Table 2. The formation of acrolein and CO_2 was found to be proportional to the O_2 concentration, and to be little dependent upon the propylene concentration. With constant concentration of the initial substances in the cycle, the formation rate of $\text{C}_3\text{H}_4\text{O}$ and CO_2 drops with rising concentration of these oxidation products, this fact being indicative of their inhibiting action. With constant propylene concentration the rate W_1 of acrolein formation obeys the equation $W_1 = k_1 [\text{O}_2] / (1 + b\Delta[\text{O}_2])$; the formation rate W_2 of CO_2 obeys the equation $W_2 = k_2 [\text{O}_2] / [\text{C}_3\text{H}_4\text{O}]^{0.7} \cdot [\text{O}_2]$ is the oxygen concentration in the cycle, $\Delta[\text{O}_2]$ is the decrease of oxygen concentration, k_1 , k_2 , and b are constants. The term $b\Delta[\text{O}_2]$ takes account of the inhibiting action. The invariable values of k_1 and k_2 on a change of the velocity of flow by the sevenfold, of $[\text{O}_2]$ by the fivefold, confirm the validity of these equations. Selectivity in-

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creases somewhat with rising propylene concentration (Fig. 1). The activation energy E_1 for the acrolein formation, E_2 for the CO_2 formation were in the temperature range between 335-380°C: $E_1 = E_2 = 36 \pm 2.5$ kcal/mole;

$b = 4.25 \exp(-10000/RT)$ [Abstracter's Note: printing error in the original text]. To clarify which of the oxidation products have an inhibiting action, individual products were removed from the cycle. As may be seen from Table 3, the reaction rate rose to the 2.5 to 3-fold on removal of $\text{C}_3\text{H}_4\text{O}$ and H_2O . If all reaction products were removed, the transformation degree of O_2 remained the same as in the case where only $\text{C}_3\text{H}_4\text{O}$ and H_2O were removed. CO_2 is thus without effect upon the reaction rate. Data obtained confirm the results by O. V. Isayev and L. Ya. Margolis (Kinetika i kataliz, 1, no. 2, 237 (1960)), according to which the oxidation rate of propylene is linearly dependent upon the oxygen concentration. They contradict, however, other conclusions reached by those researchers, according to which the oxidation products have no inhibiting action, and the propylene concentration is without any effect. The authors conclude from their data that a parallel

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formation of C_3H_4O and CO_2 takes place predominantly at lower temperatures, and a parallel-consecutive formation of CO_2 at higher temperatures. Ye. N. Popova, D. Ya. Nechiporuk, and M. V. Rybakova are thanked for their assistance. There are 1 figure, 3 tables, and 8 Soviet-bloc references.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo Akademii nauk USSR (Institute of Physical Chemistry im. L. V. Pisarzhevskiy, Academy of Sciences, UkrSSR)

PRESENTED: December 10, 1960, by A. A. Balandin, Academician

SUBMITTED: December 9, 1960

Card 4/8

GOROKHOVATSKIY, Ya.B.; RUBANIK, M.Ya.; POPOVA, Ye.N.

Effect of the carrier on the properties of propylene oxidation
catalysts. *Kin.i kat.* 3 no.1:133-138 '62. (MIRA 15:3)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN USSR.
(Propene) (Oxidation) (Catalysts)

GOROKHOVATSKIY, Ya.B.

← All-Union Conference on methods for determining the activity of
catalysts. Kin.i kat. 3 no.1:165-167 '62. (MIRA 15:3)
(Catalysis--Congresses)

BELOUSOV, V.M.; GOROKHOVATSKIY, Ya.B.; RUBANIK, M.Ya.

Kinetics of oxidation of propylene to acrolein on a copper catalyst. Kin.i kat. 3 no.2:221-229 Mr-Ap '62. (MIRA 15:11)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN UkrSSR.

(Propene)

(Acrolein)

(Catalysts, Copper)

GOROKHOVATSKIY, Ya.B.; POPOVA, Ye.N.; RUBANIK, M.Ya.

Transfer processes in the oxidation of propylene to acrolein.
Kin.i kat. 3 no.2:230-236 Mr-Ap '62. (MIRA 15:11)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN UkrSSR.
(Propene) (Acrolein) (Catalysis)

SHAPOVALOVA, L.P.; GOROKHOVATSKIY, Ya.B.; RUBANIK, M.Ya.

Oxidation of unsaturated hydrocarbons on a copper catalyst.
Ukr.khim.zhur. 28 no.9:1031-1036 '62. (MIRA 15:12)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo
AN UkrSSR.

(Olefins) (Oxidation)
(Copper catalysts)

POPOVA, Ye.N.; GOROKHOVATSKIY, Ya.B.

Effect of water vapor on the oxidation of propylene on a copper catalyst. Dokl.AN SSSR 145 no.3:570-572 J1 '62. (MIRA 15:7)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN USSR.
Predstavleno akademikom A.A.Balandinym.
(Propene) (Oxidation)

S/073/63/029/001/009/009
A057/A126

AUTHOR: Gorokhovatskiy, Ya.B.

TITLE: All-Union conference on the methods of determining the activity of catalysts

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 29, no. 1, 1963, 110 - 112

TEXT: The conference was called in by the Otdeleniye khimicheskikh nauk AN SSSR (Department for Chemical Sciences of the AS USSR), Otdeleniye khimicheskikh i geologicheskikh nauk AN USSR (Department for Chemical and Geological Sciences of the AS UkrSSR), and the Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN USSR (Institute of Physical Chemistry imeni L.V. Pisarzhevskiy AS UkrSSR) from October 9 to 12, 1961. More than 300 participants from 45 scientific institutions and 22 cities were present. A great number of the participants were from industrial organizations. At the conference there were read 20 reports and scientific papers. The chairman of the organization committee, Academician of the AS UkrSSR, V.A. Royter, opened the conference pointing out its scope, i.e., a discussion of the requirements in characterization of the activity and selectivity of catalysts, ✓

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All-Union conference on the methods of

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test methods of the activity and the appropriate equipment. The following reports are listed in present paper with short discussions: Corresponding Member of the AS USSR G.K. Boreskov and M.G. Slin'ko [Institut kataliza Sib. otd. AN SSSR (Institute for Catalysis of the Siberian Department of the AS USSR)] - "Quantitative characteristics of the catalytic activity". M.G. Slin'ko - "Modelling of contact processes". The use of the method of dynamic programming for reactor calculations was discussed in the report of L.M. Pis'men and I.I. Ioffe (NIOPiK). At this session, dedicated to problems of a precise definition of the conception of activity and selectivity as practical characterization of the value of a catalyst and problems of modelling industrial catalytic processes, reports were given on these problems by O.V. Krylov (IKhF AS USSR), B.A. Zhidkov, V.I. Atroshchenko and A.P. Zasorin (KhPI). On methods of investigating catalytic activity and the appropriate equipment 3 reports and 13 communications were read. M.I. Temkin [Fiz. khim. in-t im. Karpova (Phys. Chem Inst. imeni Karpov)] discussed advantages of non-gradient methods for determinations of the reaction rate in relation to static and flowing methods. Various types of non-gradient reactors were discussed in reports given by S.L. Kiperman (IOKhAS USSR), G.P. Korneychuk (IFKh AS UkrSSR), A.G. Lyubarskiy, V.M. Bondarenko, and I.I. Ioffe (NIOPiK), D.B. Kazarnovskaya ✓

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(GIAP), G.I. Levi (IOKh AS USSR) and others. New original designs of equipment for investigating catalysts were reported by V.E. Vasserberg (IOKh AS USSR), A.I. Tishchenko, and M.S. Brodskiy (NIOPiK), V.V. Patrikeyev (IOKh AS USSR) and others. The Corresponding Members of the AS USSR, S.Z. Roginskiy, M.I. Yanovskiy, and G. A. Gaziyeu (IKhF AS USSR) reported on "Gas-chromatographical methods for the determination of activity and selectivity and their use in selecting a catalyst". V.P. Kramskoy (IKhPM AS UkrSSR) analyzed in detail theoretical and experimental methods for the investigation of fluidized reactors in modelling of catalytic processes. V.S. Aliyev, S.A. Yefimova et al (INKhP AS AzerbSSR) and B.V. Yero-feyev, and R.I. Bel'skaya (IFOKh AS BSSR) reported on reactions in suspended layers and methods for the evaluation of catalysts by this reaction. A.P. Karnau-khov (IK SO AS USSR) reported on "Adsorption methods for measurements of the spe-cific surface and pore structure of a catalyst". The use of gas-chromatography for determinations of the surface of catalysts was discussed thoroughly in the communication by G.A. Gaziyeu, Liu-Chung-hue, S.V. Roginskiy, and M.I. Yanovskiy (IKhF AS USSR). A.M. Rubinshteyn and A.L. Klyachko-Gurvich (IOKh AS USSR) re-ported on simple and fact methods for the determination of catalyst surface and G.D. Lyubarskiy and N.V. Kul'kova [Mz-khim. in-t im. Karpova (Phys.-Chem. Inst. imeni Karpov)] upon measurements of the differential surface of nickel catalysts.

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The report "Methods considering the deforming effect of macro-factors in determining the activity of catalysts" was given by V.A. Royter. In the final session they decided upon concrete measures for the improvement of scientific and experimental investigations of the activity of catalysts. Directives were given for a more intensive use of new equipment in laboratories. The most important decision of the conference concerns standardization of catalytic activities. During the conference an exposition of equipment for the investigation of catalytic activity was shown. The participants of the conference visited the Institute of Physical Chemistry imeni L.V. Pisarzhevskiy AS UkrSSR). ✓

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POPOVA, Ye.N.; PISKUNOVA, E.V.; GOROKHOVATSKIY, Ya.B.

Oxidation of acrolein on a copper catalyst. Ukr. khim. zhur. 29
no.9:911-918 '63. (MIRA 17:4)

1. Institut fizicheskoy khimii im. L.V.Pisarzhhevskogo AN UkrSSR.

GOROKHOVATSKIY, Ya.B.; POPOVA, Ye.N.; RUBANIK, M.Ya.

Properties of the carrier of catalyst for the oxidation of
propylene to acrolein as dependent on the amount of copper.
Zhur. prikl. khim. 36 no.12:2725-2728 D'63. (MIRA 17:2)

1. Institut fizicheskoy khimii imeni L.V. Pisarshevskogo AN UkrSSR.

SHAPOVALOVA, L.P.; GOROKHOVATSKIY, Ya.B.; RUBANIK, M.Ya.

Effect of the products on the rate of isobutylene oxidation on a
copper catalyst. Dokl. AN SSSR 152 no.3:640-643 S '63.
(MIRA 16:12)

1. Institut fizicheskoy khimii im. L.V.Pisarzhevskogo AN UkrSSR.
Predstavleno akademikom M.M.Balandinym.

RUBANIK, Mikhail Yekovlevich, doktor khim. nauk; GOROKHOVATSKIY,
Yaroslav Borisovich, kand. khim. nauk;

[Incomplete catalytic oxidation of olefins] Nepochnoe ka-
taliticheskoe okislenie olefinov. Kiev, tekhnika, 1964.
234 p. (MIRA 18:1)

SHAPOVALOVA, I.F.; GOROKHOVATSKIY, Ya.E.; RUBANIK, M.Ya.

Kinetics of isobutylene oxidation to methylacrolein on a
copper catalyst. Kin. i kat. 5 no.2:330-336 Mr-Apr '64.
(MIRA 17:8)

1. Institut fizicheskoy khimii imeni I.V. Pizarzhevskogo
AN UkrSSR.

LYASHENKO, L.V.; PIS'MENNYI, Yu.G.; GOROKHOVATSKIY, Ya.B.; RUBANIK, M.Ya.

Relation between the catalytic and electronic properties of a semiconductor. Decomposition of nitrous oxide on thin copper oxide films. Kin. i kat. 5 no. 6: 1056-1062 N-D '64.

(MIRA 18:3)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR.

POPOVA, Ye.N.; GOROKHOVATSKIY, Ya.B.

Effect of water vapor on the oxidation of olefins on a copper catalyst.
Ukr. khim. zhur. 31 no.1:45-48 '65. (MIRA 18:5)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR.

POPOVA, Ye.N.; ROZHKOVA, E.V.; GOROKHOVATSKIY, Ya.B.

Oxidation of butenes on a cuprous oxide catalyst. Ukr. khim. zhur.
31 no.10:1015-1025 '65. (MIRA 19:1)

1. Institut fizicheskoy khimii AN UkrSSR. Submitted June 22, 1964.

COROKHOVER, I. A.

33420. Opyt Prepodavaniya Osnov Finansirovaniya I ucheta Zdravookhraneniya
Na Kursakh Usovershenstvovaniya I Spetsializatsii Vrachey. Sov. Zdravookhraneniye,
1949, No. 5, c. 55-56.

SO. Letopis' Zhurnal'nykh Statey, Vol. 45, Moskva, 1949

~~GOROKHOVER, Isaac Abrahamovich~~; KACHALOV, S., otvetstvennyy redaktor;
~~SEMITAL'SKAYA, E.~~, redaktor izdatel'stva; ~~LEBEDEV, A.~~, tekhnicheskiiy redaktor

[Journal-voucher forms of accounting for budget institutions]
Zhurnal'no-ordernaia forma ucheta v biudzhetsykh uchrezhdeniiakh.
Moskva, Gosfinizdat, 1956. 93 p. (MLRA 10:3)
(Accounting)

GOROKHOV, I.A.

Two-stage care of infirmity patients (method for calculating the staff). Kaz.med.shur. 41 no.1:113-116 Ja-F '60.

(MIRA 13:6)

1. Iz kafedry organizatsii sdravookhraneniya (sav. - dotsent V.I. Rudin) Kazanskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey im. V.I. Lenina.
(MEDICAL PERSONNEL)

EMDIN, V.I., dotsent; <GOROKHOVER, I.A., starshiy prepodavatel'

Advanced training for head physicians of hospitals and polyclinics.
Zdrav. Ros. Feder. 5 no. 2:39-41 F '61. (MIRA 14:2)
(MEDICINE—STUDY AND TEACHING)

GOROKHOV IKOV, L. M.

GOROKHOV IKOV, L. M. --"The Problem of the Development of the Interchangeability of Wheel Assemblies in the Repair of Hoisted Locomotives." * (Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Leningrad Order of Lenin Inst of Engineers of Railroad Transport imeni Academician V. N. Obratzov, Leningrad, 1955

SO: Knizhnaya Latopis', No. 25, 18 Jun 55

* For Degree of Candidate in Technical Sciences

MAMCHENKO, V.P., inzh.; RYAZANTSEVA, Ye.A., inzh.; DROZDOV, N.A., kand. tekhn. nauk, retsenzent; AYZINBUD, S.Ya., kand. tekhn. nauk, retsenzent; POLULEKH, V.K., inzh., retsenzent; STOLYARCHUK, I.V., kand. tekhn. nauk; GOROKHOVNIKOV, L.M., kand. tekhn. nauk; SAZONOV, A.G., inzh., red.; CHEREPASHENETS, R.G., inzh., red.; USENKO, L.A., tekhn. red.

[Operation of locomotives] Eksploatatsiia lokomotivov. Moskva, Transzheldorizdat, 1963. 415 p. (MIRA 16:12)
(Locomotives) (Railroads--~~Maryland~~)